



# UNITED STATES PATENT AND TRADEMARK OFFICE

*ml*

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,052	03/12/2004	Alan George Cole	YOR920030610US1	6731
48062 7590 05/21/2007 RYAN, MASON & LEWIS, LLP 1300 POST ROAD SUITE 205 FAIRFIELD, CT 06824			EXAMINER LE, MIRANDA	
			ART UNIT 2167	PAPER NUMBER
			MAIL DATE 05/21/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/799,052	<b>Applicant(s)</b> COLE ET AL.	
	<b>Examiner</b> Miranda Le	<b>Art Unit</b> 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Information Disclosure Statement*

1. Applicants' Information Disclosure Statement, filed 06/21/2004, has been received, entered into the record, and considered. See attached form PTO-1449.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless:

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsuura et al. (US Pub.No. 20060156209).

Matsuura anticipated independent claims 1, by the following:

**As per claim 1**, Matsuura teaches in a communication network (*Fig. 1*), a method for evaluating rules, the method comprising the steps of:

determining one or more attributes of an entity (*i.e. mobile terminal, [0116]; mobile phone 1201, the wireless IC card 1202, [0237]*), at least one of the attributes comprising location of the entity (*i.e. location of the mobile terminal, [0116]*);

evaluating one or more rules (*i.e.* prediction method C, prediction method B, prediction method A, [0103-0105]; calculates the number of stays in each location on each category of dates and times, [0148]); extracts a behavior pattern of the user of the mobile terminal; creates a user's behavior prediction rule [0119]) to produce one or more results (*i.e.* prediction result, [0415]), each of the one or more rules comprising one or more functions (*i.e.* the behavior pattern extraction unit 205 categorizes the date and time of the stay as any one of morning, daytime and night. Since the time period is from 18:00 to 18:20, it is categorized as night. As a result, a behavior pattern in which the user of the mobile terminal 11 stayed in the facility 2 on a holiday night is extracted, [0150]) that operate on the one or more attributes of the entity (*i.e.* the movement history recorded, [0119]; location on each category of dates and times, [0148]); and

performing, based on the evaluation of the one or more rules, one or more actions specified for the one or more rules, wherein at least one of the actions comprises communicating the one or more results to an application (*i.e.* The information display control unit 204 displays, on the display 105, the information obtained from the server 12 via the network IF 109, with appropriate timing, based on the current location or the current calendar attribute outputted from the GPS reception unit 108 or the calendar clock 107 as well as the behavior prediction rule held in the behavior prediction rule storage unit 203, [0120]; To be more specific, when the mobile phone 1201 comes close to the automatic ticket gate 1205, the wireless IC card 1202 carries out a local communication with the automatic ticket gate 1205. The departure station detection unit 1101 judges whether or not the mobile phone 1201 has passed through the automatic ticket gate 1205 based on the local communication carried out with the automatic ticket gate 1205, [0235]).

**As per claim 24**, Matsuura teaches an article of manufacture for evaluating rules, the article of manufacture comprising:

a computer readable medium containing one or more programs (*i.e. As shown in FIG. 2, the mobile terminal 11 has a hardware structure including a CPU 101, a hard disk 102, a RAM 103, a VRAM 104, a display 105, an input device 106, a calendar clock 107, a GPS reception unit 108 and a network IF 109, [0113]*) which when executed implement the steps of:

determining one or more attributes of an entity (*i.e. mobile terminal, [0116]; mobile phone 1201, the wireless IC card 1202, [0237]*), at least one of the attributes comprising location of the entity (*i.e. location of the mobile terminal, [0116]*);

evaluating one or more rules (*i.e. prediction method C, prediction method B, prediction method A, [0103-0105]; calculates the number of stays in each location on each category of dates and times, [0148]; extracts a behavior pattern of the user of the mobile terminal; creates a user's behavior prediction rule [0119]*) to produce one or more results (*i.e. prediction result, [0415]*), each of the one or more rules comprising one or more functions (*i.e. the behavior pattern extraction unit 205 categorizes the date and time of the stay as any one of morning, daytime and night. Since the time period is from 18:00 to 18:20, it is categorized as night. As a result, a behavior pattern in which the user of the mobile terminal 11 stayed in the facility 2 on a holiday night is extracted, [0150]*) that operate on the one or more attributes of the entity (*i.e. the movement history recorded, [0119]; location on each category of dates and times, [0148]*); and

performing, based on the evaluation of the one or more results (*i.e. To be more specific, when the mobile phone 1201 comes close to the automatic ticket gate 1205, the wireless IC card 1202 carries out a local communication with the automatic ticket gate 1205, [0235]*), one or

more actions specified for the one or more rules, wherein at least one of the actions comprises communicating the one or more results to an application (*i.e. The information display control unit 204 displays, on the display 105, the information obtained from the server 12 via the network IF 109, with appropriate timing, based on the current location or the current calendar attribute outputted from the GPS reception unit 108 or the calendar clock 107 as well as the behavior prediction rule held in the behavior prediction rule storage unit 203, [0120]; To be more specific, when the mobile phone 1201 comes close to the automatic ticket gate 1205, the wireless IC card 1202 carries out a local communication with the automatic ticket gate 1205. The departure station detection unit 1101 judges whether or not the mobile phone 1201 has passed through the automatic ticket gate 1205 based on the local communication carried out with the automatic ticket gate 1205, [0235]).*

**As per claim 25**, Matsuura teaches in a communication network (*Fig. 1*), an apparatus for evaluating spatial rules, the apparatus comprising:

at least one computer system comprising:

one or more memories (*i.e. As shown in FIG. 2, the mobile terminal 11 has a hardware structure including a CPU 101, a hard disk 102, a RAM 103, a VRAM 104, a display 105, an input device 106, a calendar clock 107, a GPS reception unit 108 and a network IF 109, [0113]); and*

one or more processors (*i.e. CPU 101, Fig. 2*) coupled to the one or more memories. The one or more processors configured:

to determine one or more attributes of an entity (*i.e. mobile terminal, [0116]; mobile phone 1201, the wireless IC card 1202, [0237]*), at least one of the attributes comprising location of the entity (*i.e. location of the mobile terminal, [0116]*);

to evaluate one or more rules (*i.e. prediction method C, prediction method B, prediction method A, [0103-0105]; calculates the number of stays in each location on each category of dates and times, [0148]*); extracts a behavior pattern of the user of the mobile terminal; creates a user's behavior prediction rule [0119]) to produce one or more results (*i.e. prediction result, [0415]*), each of the one or more rules comprising one or more functions (*i.e. the behavior pattern extraction unit 205 categorizes the date and time of the stay as any one of morning, daytime and night. Since the time period is from 18:00 to 18:20, it is categorized as night. As a result, a behavior pattern in which the user of the mobile terminal 11 stayed in the facility 2 on a holiday night is extracted, [0150]*) that operate on the one or more attributes of the entity (*i.e. the movement history recorded, [0119]; location on each category of dates and times, [0148]*); and

to perform, based on the evaluation of the one or more results (*i.e. To be more specific, when the mobile phone 1201 comes close to the automatic ticket gate 1205, the wireless IC card 1202 carries out a local communication with the automatic ticket gate 1205, [0235]*), one or more actions specified for the one or more rules, wherein at least one of the actions comprises communicating the one or more results to an application (*i.e. The information display control unit 204 displays, on the display 105, the information obtained from the server 12 via the network IF 109, with appropriate timing, based on the current location or the current calendar attribute outputted from the GPS reception unit 108 or the calendar clock 107 as well*

*as the behavior prediction rule held in the behavior prediction rule storage unit 203, [0120]; To be more specific, when the mobile phone 1201 comes close to the automatic ticket gate 1205, the wireless IC card 1202 carries out a local communication with the automatic ticket gate 1205. The departure station detection unit 1101 judges whether or not the mobile phone 1201 has passed through the automatic ticket gate 1205 based on the local communication carried out with the automatic ticket gate 1205, [0235]).*

**As to claims 2, 26,** Matsuura teaches the one or more functions comprise a plurality of functions (*i.e. prediction method A or B, [0282]*) combined through logical operators (*i.e. FIG. 10 is a diagram for explaining a method of extracting a behavior pattern, [0149]; e.g. weekday and morning, holiday and morning as shown in Fig. 10; categories such as weekdays and holidays, and morning, daytime and night, [0214]*).

**As per claim 3,** Matsuura teaches each of the one or more functions evaluates to one of a plurality of states and wherein the rule evaluates to one of the plurality of states (*i.e. the behavior pattern extraction unit 205 categorizes the date and time of the stay as any one of morning, daytime and night. Since the time period is from 18:00 to 18:20, it is categorized as night. As a result, a behavior pattern in which the user of the mobile terminal 11 stayed in the facility 2 on a holiday night is extracted, [0150]*).

**As to claims 4, 27,** Matsuura teaches there are a plurality of entities (*i.e. mobile terminal, [0116]; mobile phone 1201, the wireless IC card 1202, [0237]*), each entity corresponding to



one or more attributes, and wherein the one or more results comprise indications of which entities of the plurality of entities have attributes satisfying the one or more rules (*i.e. To be more specific, when the mobile phone 1201 comes close to the automatic ticket gate 1205, the wireless IC card 1202 carries out a local communication with the automatic ticket gate 1205. The departure station detection unit 1101 judges whether or not the mobile phone 1201 has passed through the automatic ticket gate 1205 based on the local communication carried out with the automatic ticket gate 1205, [0235]*).

As to claims 5, 28, Matsuura teaches there are a plurality of entities (*i.e. mobile terminal, [0116]; mobile phone 1201, the wireless IC card 1202, [0237]*), each entity corresponding to one or more attributes, and wherein the one or more results comprise indications of which entities of the plurality of entities have attributes resulting in a change in status of the evaluation of the one or more rules between a first evaluation of the one or more rules and a second evaluation of the one or more rules (*i.e. when the departure station detection unit 1101 detects the departure station "Gakuenmae" and the route "K Railway" the destination prediction unit 1104 searches for those departure station and route within the route search history stored in the destination candidate storage unit 1102 (Step S1305). Then, when the destination prediction unit 1104 finds those departure station and route, it selects, as a candidate for the destination, the arrival station associated with those departure station and route, [0238]*).

As to claims 6, 29, Matsuura teaches the communication network comprises a wireless portion, the entity comprises a wireless device (*i.e. mobile terminal, [0116]; mobile phone 1201,*

Art Unit: 2167

*the wireless IC card 1202, [0237]), and the entity communicates within the wireless portion of the communication network (Fig. 1).*

**As to claims 7, 30,** Matsuura teaches there are a plurality of entities subscribed to the communication network (*i.e. mobile terminal, [0116]; mobile phone 1201, the wireless IC card 1202, [0237]); and*

*the step of evaluating is performed by a plurality of nodes in the communication network (Fig. 1), each node evaluating rules over a subset of the entities (i.e. when the departure station detection unit 1101 detects the departure station "Gakuenmae" and the route "K Railway" the destination prediction unit 1104 searches for those departure station and route within the route search history stored in the destination candidate storage unit 1102 (Step S1305). Then, when the destination prediction unit 1104 finds those departure station and route, it selects, as a candidate for the destination, the arrival station associated with those departure station and route, [0238]).*

**As per claim 8,** Matsuura teaches the plurality of entities are registered with the communication network (*Fig. 1*) so as to be able to communicate with portions of the communication network (*i.e. when the departure station detection unit 1101 detects the departure station "Gakuenmae" and the route "K Railway" the destination prediction unit 1104 searches for those departure station and route within the route search history stored in the destination candidate storage unit 1102 (Step S1305). Then, when the destination prediction unit*

*1104 finds those departure station and route, it selects, as a candidate for the destination, the arrival station associated with those departure station and route, [0238]).*

**As per claim 9**, Matsuura teaches the steps of associating a side effect with the one or more rules and performing the side effect if the one or more rules evaluate to a predetermined one of a plurality of states (*i.e. The following description is made on the assumption that the mobile terminal using the location prediction method C is a mobile phone, [0220]).*

**As to claims 10, 31**, Matsuura teaches receiving a plurality of supplied rules (*i.e. there are two user's behavior patterns for Sundays through Wednesdays and Thursdays through Saturdays, [0169]);*

determining if evaluation of one or more given rules of the supplied rules produces one or more constant results for at least a selected time period (*i.e. the behavior patterns from Sundays through Wednesdays and from Thursdays through Saturdays may be used, [0169]); and*

preventing evaluation of the one or more given rules for the selected time period (*i.e. in the case where there are two user's behavior patterns for Sundays through Wednesdays and Thursdays through Saturdays, the behavior patterns from Sundays through Wednesdays and from Thursdays through Saturdays may be used, [0169]).*

**As per claim 11**, Matsuura teaches the step of preventing evaluation further comprises the steps of removing the one or more given rules from the plurality of supplied rules (*i.e. Since the storage capacity of the destination candidate storage unit 1102 is limited, it obtains a route*

Art Unit: 2167

*search history record from the traffic search unit 1101, deletes the previously stored route search history record in the order in which the records are stored, and stores the newly obtained history record preferentially, [0232]).*

**As per claim 12,** Matsuura teaches the step of determining one or more attributes of an entity comprises determining the location of the entity (*i.e. detects the location of the mobile terminal 11, [0116]; For example, if a location coordinate (E1 east longitude and N1 north latitude) shown in FIG. 7 is in the rectangular area of 10 m wide by 15 m long with its upper-left coordinate of e3 east longitude and n3 north latitude, the location coordinate corresponds to the facility, [0138-0139]).*

**As to claims 13, 32,** Matsuura teaches the one or more attributes comprise a plurality of attributes, the plurality of attributes further comprising one or more of the following: a mobile station identification, a user identification, a subscriber class, a bearing, and a speed (*i.e. The movement history recording unit 202 records the movement history of the mobile terminal 11 into the movement history data storage unit 201 based on the current location of the mobile terminal 11 outputted from the GPS reception unit 108 and the current calendar attributes outputted from the calendar clock 107, [0118]).*

**As to claims 14, 33,** Matsuura teaches the communication network (*Fig. 1*) comprises a plurality of nodes and wherein each of the plurality of nodes performs the steps of determining evaluating, and performing one or more actions (*i.e. The information transmission control unit*

*301, in response to a request from the mobile terminal 11, transmits the data stored in the category data storage unit 302 and the facility information data storage unit 303 via the network IF 300, J0123]).*

**As per claim 15**, Matsuura teaches the one or more rules comprises a plurality of rules, wherein a plurality of entities are associated with the communication network (*Fig. 1*), and wherein the method further comprises the steps of communicating the plurality of rules to each of the nodes (*i.e. The information transmission control unit 301, in response to a request from the mobile terminal 11, transmits the data stored in the category data storage unit 302 and the facility information data storage unit 303 via the network IF 300, J0123]).*

**As per claim 16**, Matsuura teaches each of the nodes corresponds to a defined coverage region, and wherein the step of evaluating further comprises the step of a given one of the plurality of nodes evaluating rules for entities in a defined coverage region corresponding to the given node (*i.e. The facility identifiers such as Facility 1 and Facility 2 indicate the facilities such as AC School and CD Shop. The site area indicates, in the case of the facility 1, a rectangular area of 10 m wide by 10 m long with its upper-left coordinate of e1 east longitude and n1 north latitude, [0138-0139]).*

**As per claim 17**, Matsuura teaches each of the entities has a corresponding set of one or more rules, wherein a given one of the nodes determines which of the plurality of entities are within a coverage region corresponding to the given node, and wherein the given node performs

the steps of determining one or more attributes of the entity, evaluating, and performing one or more actions for those nodes of the plurality of nodes that are within the coverage region and does not perform the steps of determining one or more attributes of the entity, evaluating, and performing one or more actions for those nodes of the plurality of nodes that are not within the coverage region (*i.e. To be more specific, when the mobile phone 1201 comes close to the automatic ticket gate 1205, the wireless IC card 1202 carries out a local communication with the automatic ticket gate 1205. The departure station detection unit 1101 judges whether or not the mobile phone 1201 has passed through the automatic ticket gate 1205 based on the local communication carried out with the automatic ticket gate 1205, [0235]*).

**As per claim 18**, Matsuura teaches a first node corresponds to a first defined coverage region, a second node (*i.e. AC School and CD Shop*) corresponds to a second defined coverage region, a given entity has persistent data associated with the given entity, and the first node communicates the persistent data to the second node in response to the given entity leaving the first defined coverage region and entering the second defined coverage region (*i.e. For example, if a location coordinate (E1 east longitude and N1 north latitude) shown in FIG. 7 is in the rectangular area of 10 m wide by 15 m long with its upper-left coordinate of e3 east longitude and n3 north latitude, the location coordinate corresponds to the facility, [0138-0139]*).

**As to claims 19, 34**, Matsuura teaches the step of performing one or more actions specified for the one or more rules further comprises the step of sending one or more messages to an application based on the one or more results, the one or more messages corresponding to the

one or more results (*i.e.* FIG. 41A is a diagram showing a display example of a message, FIG. 41B is a diagram showing a display example of a message asking whether or not a past history is to be used, FIG. 41C is a diagram showing a message prompting selection of a person to whom an-email is to be sent, and FIG. 41D is a diagram showing a display example of a message which was sent in the past, [0066]).

As to claims 20, 35, Matsuura teaches the one or more rules correspond to a plurality of entities (*i.e.* mobile terminal, [0116]; mobile phone 1201, the wireless IC card 1202, [0237]), the step of evaluating further comprises the step of evaluating the one or more rules for the plurality of entities to produce one or more results, wherein the one or more results comprise one or more indications as to which of the plurality of entities has attributes satisfying the one or more rules, and wherein the step of performing further comprises the step of communicating one or more messages having the one or more indications to an application (*i.e.* FIG. 12 is a diagram showing facility information data. In this facility information data 303a, the names of respective facilities 1, 2 . . . identified by the facility identifiers and the latest information thereof are recorded. For example, the facility 1 is "Boss Burger Keihanna", and "Croquette Burger 190 Now on Sale . . . " is recorded as the latest information, [0127]).

As per claim 21, Matsuura teaches the one or more indications comprise a subscriber position record for at least one of the entities meeting the one or more rules (*i.e.* FIG. 41A is a diagram showing a display example of a message, FIG. 41B is a diagram showing a display example of a message asking whether or not a past history is to be used, FIG. 41C is a diagram

*showing a message prompting selection of a person to whom an-email is to be sent, and FIG.*

*41D is a diagram showing a display example of a message which was sent in the past, [0066]).*

**As per claim 22**, Matsuura teaches the one or more attributes further comprises a subscriber identification, and wherein the one or more rules correspond to one or more geographical regions or one or more subscriber identifications (*i.e. The facility identifiers such as Facility 1 and Facility 2 indicate the facilities such as AC School and CD Shop. The site area indicates, in the case of the facility 1, a rectangular area of 10 m wide by 10 m long with its upper-left coordinate of e1 east longitude and n1 north latitude, [0138-0139]).*

**As per claim 23**, Matsuura teaches the step of performing, based on the one or more results, one or more actions specified for the one or more rules further comprises the step of communicating a rule-triggered event to the application, wherein the rule-triggered event is specified for the one or more rules and corresponds to the entity (*i.e. To be more specific, when the mobile phone 1201 comes close to the automatic ticket gate 1205, the wireless IC card 1202 carries out a local communication with the automatic ticket gate 1205. The departure station detection unit 1101 judges whether or not the mobile phone 1201 has passed through the automatic ticket gate 1205 based on the local communication carried out with the automatic ticket gate 1205, [0235]).*



Art Unit: 2167

*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (571) 272-4112. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham, can be reached on (571) 272-7079. The fax number to this Art Unit is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Miranda Le  
May 09, 2007